

**The Pending Claims Particularly Point Out and Distinctly  
Claim the Subject Matter of the Present Invention**

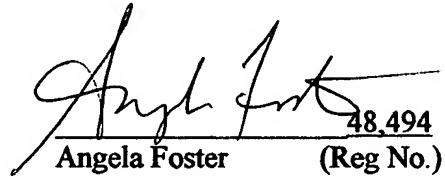
Claims 8-41 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants submit that this rejection has been obviated because Claims 8-41 have been amended to avoid the Examiner's objections. Specifically, the Examiner states that Claims 8-41 are confusing because independent Claims 8, 13, 19, 24, 30 and 36 recite the limitation "said nucleic acid products amplified from step (b)" in step (c) of the claimed methods. The Examiner further states that there is insufficient antecedent basis for this limitation in the claims, because according to the Examiner step (b) recites "amplifying nucleic acid present in said sample using primer set". Applicants have amended Claims 8, 13, 19, 24, 30 and 36 to obviate this rejection. Accordingly, Applicant submit the rejection under the second paragraph of 35 U.S.C. § 112 should be withdrawn.

**Conclusion**

For all the above reasons, Applicants respectfully submits that all the rejections based on 35 U.S.C. § 112 have been avoided and should be withdrawn. Claims 1-7 and 42-46 have been allowed. Applicants further submit that claims 8-41 are in form for allowance, and respectfully requests early action to that end.

Respectfully submitted,

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## 5. BRIEF DESCRIPTION OF THE FIGURES

**Figure 1** shows an autoradiogram of an 8% native polyacrylamide gel revealing the amplification product of the ITSS of mycobacteria with MOTT primers in 100 µl reactions. Lane (1) negative control containing all reaction components and no template DNA; Lane (2) purified *M. bovis* genomic DNA (10 ng); Lane (3) purified *M. tuberculosis* H37Rv genomic DNA (10 ng); Lane (4) purified *M. fortuitum* genomic DNA (10 ng); Lane (5) purified *M. chelonae* genomic DNA (10 ng); Lane (6) purified *M. avium* genomic DNA (10 ng); Lane (7) purified *M. kansasii* genomic DNA (0.01 ng); and Lane (8) purified *M. scrofulaceum* genomic DNA (0.1 ng ).

**Figure 2** shows an autoradiogram of an 8% native polyacrylamide gel revealing the amplification of genomic DNA extracted from patient samples using MOTT primers. Lane (1) negative control containing all reaction components and no template DNA; Lane (2) negative acid-fast sputum smear; Lane (3) acid-fast positive pleural fluid; and Lane (4) positive control (*M. avium* genomic DNA).

**Figure 3** shows an autoradiogram of an 8% native polyacrylamide gel revealing the amplification product of the ITSS of mycobacteria with *M. chelonae* (MC) primers in 100 µl reactions. Lane (1) negative control containing all reaction components and no template DNA; Lane (2) purified *M. avium* genomic DNA (10 ng); Lane (3) purified *M. scrofulaceum* genomic DNA (10 ng); Lane (4) purified *M. bovis* genomic DNA (10 ng); Lane (5) purified *M. tuberculosis* H37Rv genomic DNA (10 ng); Lane (6) purified *M. fortuitum* genomic DNA (10 ng); and Lane (7) purified *M. chelonae* genomic DNA (0.01 ng).

**Figure 4** shows an autoradiogram of an 8% native polyacrylamide gel revealing the amplification of genomic DNA extracted from patient samples using *M. chelonae* (MC) primers. Lane (1) negative control containing all reaction components and no